

## **REDUCING QUANTIZATION ERRORS IN IMAGING SYSTEMS**

### **ABSTRACT OF THE DISCLOSURE**

A technique is described to greatly reduce or avoid the quantization errors that occur when  
5 mapping a relatively linear RGB color space into a greatly non-linear printer CMY color  
space of equal precision, avoiding the contouring or banding that occurs when printing  
color gradients in a non-linear printing system. The technique performs a dither-like  
process on the original RGB continuous tone data. The RGB values are dithered to create  
a range of values that, when mapped to the non-linear printer continuous tone CMY  
10 values, creates a range of CMY values that, on average, represent the correct average tone  
of the input RGB values. The generated CMY continuous tone values are then halftoned  
and printed.